

PTO/SB/21 (05/03)

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**TRANSMITTAL  
FORM**

(to be used for all correspondence after initial filing)

<b>TRANSMITTAL FORM</b>  (to be used for all correspondence after initial filing)	Application Number	10/047,101
	Filing Date	January 17, 2002
	First Named Inventor	Daniel P. Carter
	Art Unit	3743
Examiner Name	Tho V. Duong	
Total Number of Pages in This Submission	10	Attorney Docket Number 02207/11461

**ENCLOSURES (check all that apply)**

<input type="checkbox"/> Fee Transmittal Form  <input type="checkbox"/> Fee Attached  <input type="checkbox"/> Amendment / Response  <input type="checkbox"/> After Final  <input type="checkbox"/> Affidavits/declaration(s)  <input type="checkbox"/> Extension of Time Request  <input type="checkbox"/> Express Abandonment Request  <input type="checkbox"/> Information Disclosure Statement  <input type="checkbox"/> Certified Copy of Priority Document(s)  <input type="checkbox"/> Response to Missing Parts/ Incomplete Application  <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application)  <input type="checkbox"/> Drawing(s)  <input type="checkbox"/> Licensing-related Papers  <input type="checkbox"/> Petition  <input type="checkbox"/> Petition to Convert to a Provisional Application  <input checked="" type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address  <input type="checkbox"/> Terminal Disclaimer  <input type="checkbox"/> Request for Refund  <input type="checkbox"/> CD, Number of CD(s)	<input type="checkbox"/> After Allowance Communication to Group  <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences  <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)  <input type="checkbox"/> Proprietary Information  <input type="checkbox"/> Status Letter  <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below):  <b>Certificate under 37 CFR 3.73(b) and copies of Assignment and other documents in chain of title</b>
<b>RECEIVED</b>  AUG 15 2003  TECHNOLOGY CENTER R3700		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

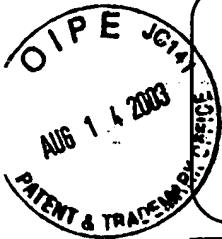
Firm or Individual name	KENYON & KENYON by Shawn W. O'Dowd, Reg. No. 34,687
Signature	<i>Shawn O'Dowd</i>
Date	8/14/03

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.			
Typed or printed name			
Signature		Date	

This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



**POWER OF ATTORNEY OR  
AUTHORIZATION OF AGENT**

Application Number	10/047,101
Filing Date	January 17, 2002
First Named Inventor	Daniel P. Carter
Art Unit	3743
Examiner Name	Tho V. Duong
Attorney Docket Number	02207/11461

I hereby appoint:

☒ Practitioners at Customer Number 23838

OR

☐ Practitioner(s) named below:

Name	Registration Number

Place Customer  
Number Bar Code  
Label here

as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the Patent and Trademark Office connected therewith.

Please change the correspondence address for the above-identified application to:

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OR

☐ Practitioners at Customer Number

OR

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☒ Firm or  
Individual Name Shawn W. O'Dowd

Address Kenyon & Kenyon

Address 1500 K Street, N.W.

City Washington

State

DC

ZIP

20005

Country USA

Telephone (202) 220-4255

Fax

(202) 220-4201

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I am the:

☐ Applicant/Inventor.

☒ Assignee of record of the entire interest. See 37 CFR 3.71.

Certificate under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).

AUG 15 2003

TECHNOLOGY CENTER R3700

**SIGNATURE of Applicant or Assignee of Record**

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

Name	Pam Matlock	Title	Secretary of Patents
Signature	<i>Pam Matlock</i>		
Date	August 12, 2003	Telephone	408/765-1144

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☒ \*Total of one (1) forms are submitted.

This collection of information is required by 37 CFR 1.31 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

**STATEMENT UNDER 37 CFR 3.73(b)**Applicant/Patent Owner: Intel CorporationApplication No./Patent No.: 10/047,101Filed/Issue Date: January 17, 2002Entitled: HEAT SINKS AND METHOD OF FORMATION

\_\_\_\_\_, a \_\_\_\_\_  
 (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that it is:

1. ☒ the assignee of the entire right, title, and interest; or  
 2. ☐ an assignee of less than the entire right, title, and interest

The extent (by percentage) of its ownership interest is \_\_\_\_\_ %

in the patent application/patent identified above by virtue of either:

- A. ☒ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel 012790, Frame 0454, or for which a copy thereof is attached.

OR

- B. ☐ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below:

1. From: \_\_\_\_\_ To: \_\_\_\_\_  
 The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached.

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☐ Additional documents in the chain of title are listed on a supplemental sheet.

- ☒ Copies of assignments or other documents in the chain of title are attached.

**(NOTE:** A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8]

The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee.

August 12, 2003  
 Date

(408) 765-1144

Telephone Number

Pam Matlock  
 Signature

Pam Matlock

Typed or printed name

Secretary of Patents

Title

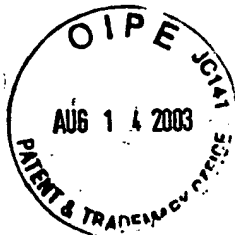
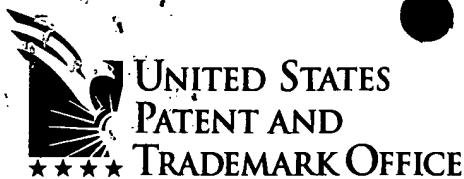
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JUNE 12, 2002

PTAS  
ANTONELLI, TERRY, STOUT & KRAUS, LLP  
DAVID C. OREN  
1300 NORTH SEVENTEENTH STREET  
SUITE 1800  
ARLINGTON, VIRGINIA 22209

Chief Information Officer  
Washington, DC 20231  
www.uspto.gov



\*102059468A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 04/15/2002

REEL/FRAME: 012790/0454  
NUMBER OF PAGES: 5

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
CARTER, DANIEL P.

DOC DATE: 04/11/2002

ASSIGNOR:  
CROCKER, MICHAEL T.

DOC DATE: 04/09/2002

ASSIGNOR:  
BROILI, BEN M.

DOC DATE: 04/11/2002

ASSIGNEE:  
INTEL CORP.  
2200 MISSION COLLEGE BLVD.  
SC4-202  
SANTA CLARA, CALIFORNIA 95052

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**AUG 15 2003**

**TECHNOLOGY CENTER R3700**

SERIAL NUMBER: 10047101  
PATENT NUMBER:

FILING DATE: 01/17/2002  
ISSUE DATE:

012790/0454 PAGE 2

SHARON BROOKS, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

APR 15 2002

RECORD  
PA

04-18-2002



To the Commissioner of Patents and Trademarks: P

102059468

its or copy thereof.

## 1. Name of conveying party(ies):

- 1.) Daniel P. Carter;  
2.) Michael T. Crocker; and  
3.) Ben M. Broili

Additional name(s) of conveying party(ies) attached? Yes No ■

## 2. Name and address of receiving party(ies):

Name: INTEL CORP.

Street Address: 2200 Mission College Blvd. SC4-202

City: Santa Clara State: California Country: U.S.A.

Zip: 95052

Additional name(s) &amp; address(es) attached? Yes No

## 3. Nature of conveyance:

- Assignment Merger  
Security Agreement Change of Name  
Other

Execution Date: 1) 4/11/02; 2.) 4/9/02; &amp; 3.) 4/11/02

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

10/047,101

B. Patent No.(s)

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AUG 15 2003

TECHNOLOGY CENTER R3700

Additional numbers attached? Yes No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: ANTONELLI, TERRY, STOUT &amp; KRAUS, LLP

Internal Address:

Street Address: 1300 North Seventeenth Street  
Suite 1800

City: Arlington State: Virginia Zip: 22209

## 6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) .....\$40.00

**Enclosed (Credit Card Payment Form for \$40.00)**

Any deficiencies may be charged to deposit account

Authorized to be charged to deposit account

## 8. Deposit account number: 01-2135

(Attach duplicate copy of this page if paying by deposit account)

**DO NOT USE THIS SPACE**

## 9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*David C. Oren

Name of Person Signing

Attorney Registration No. 38,694

Signature

April 15, 2002

Date

Total number of pages including cover sheet, attachments, and document: 5

OMB No. 0651-0011 (exp. 4/94)

The PTO did not receive the following  
listed item(s) Credit card payment

**ASSIGNMENT**

(For Execution After Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, 1.) Daniel P. CARTER, 2.) Michael T. CROCKER and 3.) Ben M. BROIL the undersigned, residing at 1.) 14668 Komedal Rd., Bainbridge Island, WA 98110, 2.) 715 N. 12<sup>th</sup> Street, Tacoma, WA 98403 and 3.) 3108 N. 25<sup>th</sup> Street, Tacoma, WA 98406, hereby sell, assign, and transfer to INTEL CORPORATION, a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, SC4-202 Santa Clara, CA 95052, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that was filed January 17, 2002 and assigned Application Serial No. 10/047,101, and is entitled HEAT SINKS AND METHOD OF FORMATION, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

Rev. 01/2002 (A2)



**ASSIGNMENT**  
(For Execution After Filing Patent Application)

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, 1.) Daniel P. CARTER, 2.) Michael T. CROCKER and 3.) Ben M. BROIL the undersigned, residing at 1.) 14668 Komedal Rd., Bainbridge Island, WA 98110, 2.) 715 N. 12<sup>th</sup> Street, Tacoma, WA 98403 and 3.) 3108 N. 25<sup>th</sup> Street, Tacoma, WA 98406, hereby sell, assign, and transfer to INTEL CORPORATION, a corporation of Delaware, having a principal place of business at 2200 Mission College Boulevard, SC4-202 Santa Clara, CA 95052, ("Assignee"), and its successors, assigns, and legal representatives, the entire right, title, and interest for the United States and all foreign countries, in and to any and all improvements that are disclosed in the application for the United States patent that was filed January 17, 2002 and assigned Application Serial No. 10/047,101, and is entitled HEAT SINKS AND METHOD OF FORMATION, and in and to said application and all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications that have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original patents, reissued patents, reexamination certificates, and extensions that have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all rights of priority resulting from the filing of said United States application;

agree that said Assignee may apply for and receive a patent or patents for said improvements in its own name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns, and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional applications, continuation applications, continued prosecution applications, continuation-in-part applications, substitute applications, renewal applications, reissue applications, reexaminations, extensions, and all other patent applications on any and all said improvements; execute all rightful oaths, assignments, powers of attorney, and other papers; communicate to said Assignee, its successors, assigns, and representatives all facts known to the undersigned relating to said improvements and the history thereof; and generally assist said Assignee, its successors, assigns, or representatives in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements, and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns, and legal representatives; and

covenant with said Assignee, its successors, assigns, and legal representatives that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

Date: \_\_\_\_\_, 200\_\_

Name: Daniel P. CARTER

Date: 9 APRIL, 2002

Name: Michael T. CROCKER

Date: \_\_\_\_\_, 200\_\_

Name: Ben M. BROILI

State of: Washington }  
County of: Clark } SS.

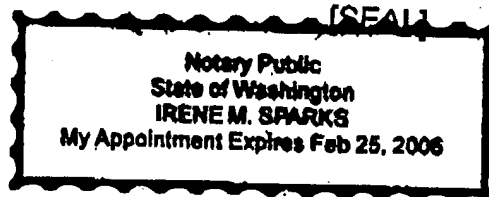
On this 9 day of April, 2002, before me, Irene M. Sparks, the undersigned Notary Public, personally appeared Michael T. Crocker

☐ personally known to me ☒ proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is subscribed to the within instrument, and acknowledged that he executed it.

WITNESS my hand and official seal.

Irene M. Sparks

Notary's Signature



Assignment Return Address:  
ANTONELLI, TERRY, STOUT & KRAUS, LLP  
1300 North Seventeenth Street, Suite 1800  
Arlington, VA 22209  
Telephone 703-312-6600